

## Complete Summary

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### GUIDELINE TITLE

Practice parameters for antibiotic prophylaxis to prevent infective endocarditis or infective prosthesis during colon and rectal endoscopy.

### BIBLIOGRAPHIC SOURCE(S)

Practice parameters for antibiotic prophylaxis to prevent infective endocarditis or infected prosthesis during colon and rectal endoscopy. The Standards Task Force. The American Society of Colon and Rectal Surgeons. Dis Colon Rectum 2000 Sep; 43(9): 1193.

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## SCOPE

### DISEASE/CONDITION(S)

- Infective prosthesis (vascular, orthopedic, other)
- Infective endocarditis:
  - Native valve endocarditis
  - "Early" prosthetic valve endocarditis
  - Late-onset prosthetic valve endocarditis
  - Enterococcal endocarditis

### GUIDELINE CATEGORY

Prevention  
 Risk Assessment

### CLINICAL SPECIALTY

Colon and Rectal Surgery

## INTENDED USERS

Physicians

## GUIDELINE OBJECTIVE(S)

To present practice parameters for antibiotic prophylaxis to prevent infective endocarditis or infective prosthesis during colon and rectal endoscopy.

## TARGET POPULATION

Adult patients undergoing colon and rectal endoscopy

## INTERVENTIONS AND PRACTICES CONSIDERED

Risk Assessment/Prognosis and Prevention

1. Assessment of risk factors for endocarditis
2. Adult antibiotic prophylactic regimens
  - Ampicillin, gentamicin, and amoxicillin
  - Vancomycin and gentamicin
  - Amoxicillin or ampicillin

## MAJOR OUTCOMES CONSIDERED

- Efficacy of antibiotics in preventing endocarditis
- Incidence of postprocedural endocarditis

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

### NUMBER OF SOURCE DOCUMENTS

Not stated

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

#### METHODS USED TO ANALYZE THE EVIDENCE

Review

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

### RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

Excerpted by the National Guideline Clearinghouse (NGC):

##### Practice Parameters for Antibiotic Prophylaxis

Bacterial endocarditis is a serious, potentially fatal condition that may be associated with endoscopic procedures. Antibiotic prophylaxis has been used to prevent endocarditis, but does involve risks. Endoscopists must assess the evidence and weigh the risks and benefits.

##### Conditions Associated with Endocarditis

High risk

- Prosthetic cardiac valves

- History of endocarditis
- Surgically constructed systemic pulmonary shunts
- Complex cyanotic congenital heart disease
- Vascular grafts (first 6 months after implantation)

#### Moderate risk

- Most other cardiac malfunctions
- Acquired valvular dysfunction
- Hypertrophic cardiomyalgia
- Mitral valve prolapse with valvular regeneration or thickened valves or both

#### Low risk

- Vascular graft material (6 months after implantation)
- Orthopedic prosthesis
- Central nervous system ventricular shunts
- Penile prosthesis
- Intraocular lens
- Pacemakers
- Local tissue augmentation material
- Isolated secundum atrial septal defect
- Previous coronary bypass
- Mitral valve prolapse without valvular degeneration
- Physiologic heart murmurs
- Previous rheumatic fever without valvular dysfunction
- Cardiac pacemaker

It is the consensus of The Standards Task Force that antibiotic prophylaxis be considered only for the high-risk groups.

#### Nonvalvular and Noncardiac Prosthesis

#### Prophylactic Regimens

It is impossible to make recommendations for all clinical situations. Practitioners must choose the antibiotic and determine the dosage based on the special circumstances of each case. Adult prophylactic regimens listed in the table below are representative of recommendations made by the American Heart Association (AHA). Although the other organisms may be cultured after lower endoscopy, enterococcus is the most likely cause of endocarditis; therefore, the prophylactic regimens are directed primarily against enterococci.

#### Adult Prophylactic Regimens:

Drug	Adult Dosage Regimen
Ampicillin, gentamicin, and amoxicillin	Intravenous or intramuscular administration of ampicillin (2.0 g) plus gentamicin (1.5 mg/kg; not to exceed 120 mg) 30 minutes before procedure, followed by amoxicillin (1 g) orally

	6 hours after initial dose or ampicillin 1 g intramuscularly or intravenously.
Vancomycin and gentamicin*	Intravenous administration of vancomycin (1.0 g) over 1 to 2 hours plus intravenous or intramuscular administration of gentamicin (1.5 mg/kg; not to exceed 120 mg), complete infusion within 30 minutes of starting procedure.
Amoxicillin** or ampicillin	Amoxicillin 2 g orally or ampicillin 2 g intramuscularly or intravenously within 30 minutes of starting procedure.

\*Ampicillin or amoxicillin or penicillin-allergic regimen.

\*\*Alternative moderate-risk regimen.

#### CLINICAL ALGORITHM(S)

None provided

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

Decreased incidence of postprocedural endocarditis

#### POTENTIAL HARMS

Side effects of antibiotics:

- Penicillin has been known to precipitate anaphylaxis even when given orally.
- Antibiotics in a single prophylactic dose put the patient at risk for developing pseudomembranous enterocolitis.

### QUALIFYING STATEMENTS

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1. It should be recognized that these guidelines should not be deemed inclusive of all proper methods of care or exclusive of methods of care reasonably

- directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific procedure must be made by the physician in light of all of the circumstances presented by the individual patient.
2. The complex nature of individualized patient care does not allow standards to be spelled out for every clinical category, and the risk of administering antibiotics must be weighed against the risk of infection for each patient.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Staying Healthy

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Practice parameters for antibiotic prophylaxis to prevent infective endocarditis or infected prosthesis during colon and rectal endoscopy. The Standards Task Force. The American Society of Colon and Rectal Surgeons. Dis Colon Rectum 2000 Sep; 43(9): 1193.

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2000

### GUIDELINE DEVELOPER(S)

American Society of Colon and Rectal Surgeons - Medical Specialty Society

### SOURCE(S) OF FUNDING

American Society of Colon and Rectal Surgeons

## GUIDELINE COMMITTEE

Standards Task Force, American Society of Colon and Rectal Surgeons

## COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Task Force Members: Greg Oliver, M.D., Project Director, Ann Lowry, M.D., Committee Chair, Anthony Vernava, M.D., Vice Chairman, Terry Hicks, M.D., Council Representative, Marcus Burnstein, M.D., Frederick Denstman, M.D., Victor Fazio, M.D., Bruce Kerner, M.D., Richard Moore, M.D., Walter Peters, M.D., Theodore Ross, M.D., Peter Senatore, M.D., Clifford Simmang, M.D., Steven Wexner, M.D., W. Douglas Wong, M.D.

## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

## GUIDELINE STATUS

This is the current release of the guideline. This guideline updates a previously issued guideline (Practice parameters for antibiotic prophylaxis to prevent infective endocarditis or infected prosthesis during colon and rectal endoscopy. The American Society of Colon and Rectal Surgeons. Dis Colon Rectum 1992 Mar; 35[3]: 277).

## GUIDELINE AVAILABILITY

Electronic copies: Available from the [American Society of Colon and Rectal Surgeons \(ASCRS\) Web site](#).

Print copies: Available from ASCRS, 85 W. Algonquin Road, Suite 550, Arlington Heights, Illinois 60005.

## AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Oliver G, Lowry A, Vernava A, Hicks T, Burnstein M, Denstman F, Fazio V, Kerner B, Moore R, Peters W, Ross T, Senatore P, Simmang C, Wexner S, Wong Practice parameters for antibiotic prophylaxis--supporting documentation. The Standards Task Force. The American Society of Colon and Rectal Surgeons. Dis Colon Rectum. 2000 Sep; 43(9): 1194-200.

Electronic copies: Available from the [American Society of Colon and Rectal Surgeons \(ASCRS\) Web site](#).

Print copies: Available from ASCRS, 85 W. Algonquin Road, Suite 550, Arlington Heights, Illinois 60005.

## PATIENT RESOURCES

None available

#### NGC STATUS

This summary was completed by ECRI on February 12, 2001. The information was verified by the guideline developer as May 4, 2001.

#### COPYRIGHT STATEMENT

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